

- 69. (New) A transgenic mouse comprising a mutant GP IIIa (β_3) gene wherein the mutant gene encodes a GP IIIa (β_3) protein having a cytoplasmic domain tyrosine residue replaced with a non-phosphorylatable residue.
70. (New) The transgenic mouse of claim 69 wherein the cytoplasmic domain tyrosine residue is tyrosine residue 747 or tyrosine residue 759.
71. (New) The transgenic mouse of claim 69 wherein the non-phosphorylatable residue is phenylalanine.
72. (New) A transgenic mouse comprising a mutant GP IIIa (β_3) gene wherein the mutant gene encodes a GPIIIa (β_3) protein having two cytoplasmic domain tyrosine residues replaced with non-phosphorylatable residues.
73. (New) The transgenic mouse of claim 72 wherein the cytoplasmic domain tyrosine residues are tyrosine residue 747 and tyrosine residue 759.
74. (New) The transgenic mouse of claim 72 wherein each cytoplasmic tyrosine residue is replaced with a phenylalanine residue.
75. (New) Platelets isolated from blood plasma of the transgenic mouse of claim 69.
76. (New) A transgenic mouse which expresses a transgene integrated into its genome, wherein the transgene comprises DNA encoding a mutant GP IIIa (β_3)

protein having a cytoplasmic domain tyrosine residue replaced with a non-phosphorylatable residue.

77. (New) The transgenic mouse of claim 76 wherein the cytoplasmic domain tyrosine residue is tyrosine residue 747 or tyrosine residue 759.
78. (New) The transgenic mouse of claim 76 wherein the non-phosphorylatable residue is phenylalanine.
79. (New) A transgenic mouse which expresses a transgene integrated into its genome, wherein the transgene comprises DNA encoding a mutant GP IIIa (β_3) protein having two cytoplasmic domain tyrosine residues replaced with non-phosphorylatable residues.
80. (New) The transgenic mouse of claim 79 wherein the cytoplasmic domain residues are tyrosine residue 747 and tyrosine residue 759.
81. (New) The transgenic mouse of claim 79 wherein each cytoplasmic tyrosine residue is replaced with a phenylalanine residue.
82. (New) Platelets isolated from blood plasma of the transgenic mouse of claim 76.
83. (New) A method of preparing a transgenic mouse comprising a mutant GP IIIa (β_3) gene, wherein the mutant gene encodes a mutant GP IIIa (β_3) protein having

a cytoplasmic domain tyrosine residue replaced with a non-phosphorylatable residue, the method comprising:

- a) introducing into embryonic stem cells a nucleic acid molecule comprising the mutant GP IIIa (β_3) gene, wherein the mutant gene encodes the mutant GP IIIa (β_3) protein;
- b) generating a transgenic mouse from the cells of step a).

84. (New) The method of claim 83 wherein the cytoplasmic domain tyrosine residue is tyrosine residue 747 or tyrosine residue 759.

85. (New) The method of claim 83 wherein the non-phosphorylatable residue is phenylalanine.

86. (New) The method of claim 83 further comprising:

- c) mating the transgenic mouse; and
- d) selecting a mouse homozygous for the mutant GP IIIa (β_3) gene.

87. (New) A method of preparing a transgenic mouse comprising a mutant GP IIIa (β_3) gene encoding a mutant GP IIIa (β_3) protein having a cytoplasmic domain tyrosine residue replaced with a non-phosphorylatable residue, the method comprising:

- a) introducing into embryonic stem cells a nucleic acid molecule comprising the mutant GP IIIa (β_3) gene encoding the mutant GP IIIa (β_3) protein and a

selectable marker flanked by FRT sites, to produce one or more transformed embryonic stem cells;

- b) identifying and selecting the transformed cells;
- c) removing the selectable marker from the transformed cells selected in step b) by transient transformation with FLP recombinase;
- d) injecting transformed cells from step c) into one or more blastocysts; and
- e) generating a transgenic mouse from the blastocysts of step d), wherein the transgenic mouse comprising the mutant GP IIIa gene is heterozygous for the mutant GP IIIa gene.

88. (New) The method of claim 87 wherein the non-phosphorylatable residue is phenylalanine.

89. (New) The method of claim 87 wherein the cytoplasmic domain tyrosine residue is tyrosine residue 747 or tyrosine residue 759.

90. (New) The method of claim 87 further comprising:

- f) mating the transgenic mouse; and
- g) selecting a transgenic mouse homozygous for the mutant GP IIIa (β_3) gene.

91. (New) The method of claim 87 further comprising:

- f) mating a heterozygous transgenic mouse with a second heterozygous transgenic mouse; and